

WHAT IS CLAIMED IS:

1. An organic EL display device which individually controls the amount of current of organic EL elements, which are arranged in a matrix of pixels, according to an input image signal, comprising:

total current detection means for detecting the total current flowing to all the organic EL elements arranged in the pixel matrix;

offset voltage setting means for determining an offset voltage to offset the input image signal so as to apply a voltage which causes the current to start flowing to the organic EL elements according to a black level of the input image signal; and

offset voltage control means for controlling the offset voltage, which is responsive to the offset voltage setting means, according to the total current detected by the total current detection means.

2. The organic EL display device according to claim 1, wherein:

the offset voltage setting means receives an offset adjustment voltage and an input image signal and amplifies the offset adjustment voltage according to a difference between them; and

the offset voltage control means changes the offset adjustment voltage based on the total current detected by the total current detection means.

3. The organic EL display device according to claim 1 wherein:

the total current detection means outputs a prescribed value when the detected total current has a prescribed value or less and outputs a value proportional to the total current when the detected total current exceeds the prescribed value; and

the offset voltage control means controls an offset voltage according to a value obtained by adding a predetermined black level adjustment value to the output of the total current detection means.

4. An organic EL display device which displays by individually controlling an amount of current to each such organic EL element, which are

arranged in a matrix of pixels, according to an input image signal, comprising:
a power supply which supplies total current flowing to all the
organic EL elements arranged in the pixel matrix; and
a resistor which is disposed between the power supply and the
organic EL elements arranged in the pixel matrix so that when the total current
becomes large, a voltage drop becomes large in the low resistor to suppress the
current of the organic EL elements.